What is claimed is:

1. A cardiac stimulus device lead, comprising:

a first conductor connected to a multiplexer switch, the multiplexer switch including a first terminal connected to a first electrode and a second terminal connected to a sensing circuit;

a second conductor connected to a second electrode; and

a controller connected to the multiplexer switch,

wherein the controller is adapted to selectively connect the first conductor to one of the first electrode and the sensing circuit.

2. The cardiac stimulus device lead of claim 1, wherein the controller is adapted to selectively connect the first conductor to the first electrode during a pacing pulse on the first conductor.

3. The cardiac stimulus device lead of claim 2, wherein the controller is adapted to selectively connect the first conductor to the sensing circuit after the pacing pulse.

4. The cardiac stimulus device lead of claim 3, wherein the controller is adapted to selectively connect the first conductor to the first electrode during an active discharge pulse, and the controller is adapted to selectively connect the first conductor to the sensing circuit after the pacing pulse and before the active discharge pulse.

5. The cardiac stimulus device lead of claim 1, further comprising a capacitor selectively coupled between the first conductor and the second conductor for storing a charge from an electrical pulse.

6. The cardiac stimulus device lead of claim 5, wherein the controller is coupled to the capacitor for being powered by the charge stored thereon.

7. The cardiac stimulus device lead of claim 6, wherein the controller is adapted for providing a control signal to selectively couple the capacitor between the first conductor and the second conductor.

8. The cardiac stimulus device lead of claim 6, wherein the sensing circuit is selectively coupled to the capacitor for being powered by the charge stored thereon.

9. The cardiac stimulus device lead of claim 8, wherein the controller is adapted to provide a control signal to selectively couple the sensing circuit to the capacitor.

10. The cardiac stimulus device lead of claim 1, wherein the sensing circuit includes a sensor.

11. The cardiac stimulus device lead of claim 1, wherein the sensing circuit is a micro-electromechanical system.

12. The cardiac stimulus device lead of claim 1, wherein the sensing circuit is adapted to sense biochemicals.

13. The cardiac stimulus device lead of claim 1, wherein the sensing circuit is adapted to sense oxygen.

14. The cardiac stimulus device lead of claim 1, wherein the sensing circuit is adapted to sense carbon dioxide.

15. The cardiac stimulus device lead of claim 1, wherein the sensing circuit is adapted to sense catecholamines.

16. The cardiac stimulus device lead of claim 1, wherein the sensing circuit is adapted to sense temperature.

17. The cardiac stimulus device lead of claim 1, wherein the sensing circuit is adapted to sense pressure.

18. The cardiac stimulus device lead of claim 1, wherein the controller includes sensor circuit (SC) control circuitry adapted to control the sensing circuit.

19. The cardiac stimulus device lead of claim 1, further comprising a capacitor selectively coupled between the first conductor and the second conductor for storing a charge from an electrical pulse, wherein the controller includes capacitor coupling control circuitry adapted to selectively couple a capacitor between the first conductor and the second conductor.

20. The cardiac stimulus device lead of claim 19, wherein the capacitor coupling control circuitry is adapted to provide a control signal to actuate a switch disposed between the first conductor and the capacitor.

21. The cardiac stimulus device lead of claim 1, wherein the controller includes sensing circuit (SC) output control circuitry adapted to selectively couple the first conductor to either an output of the sensing circuit or to the first electrode.

22. The cardiac stimulus device lead of claim 21, wherein the SC output control circuitry is adapted to provide a control signal to actuate the multiplexer switch.

23. The cardiac stimulus device lead of claim 1, wherein the controller includes sensing circuit (SC) power coupling circuitry to selectively couple a power input of the sensing circuit to a capacitor to provide power to the sensing circuit from the charge stored on the capacitor.

24. The cardiac stimulus device lead of claim 23, wherein the SC power coupling circuitry is adapted to provide a control signal to actuate a switch disposed between the power input of the SC power coupling circuitry and the capacitor.

25. The cardiac stimulus device lead of claim 1, wherein the controller includes a timer to time at least one control signal to selectively connect the first conductor to one of the first electrode and the sensing circuit.

26. The cardiac stimulus device of claim 25, wherein the controller is adapted to sense an electrical pulse, and the timer is adapted to time the at least one control signal to selectively connect the first conductor to the sensing circuit after the electrical pulse.

27. The cardiac stimulus device lead of claim 25, wherein the controller is adapted to sense a pacing pulse, and the timer is adapted to time the at least one control signal to selectively connect the first conductor to the sensing circuit after the pacing pulse.

28. The cardiac stimulus device lead of claim 27, wherein the timer is further adapted to time the at least one control signal to selectively connect the first conductor to the sensing circuit before an active discharge pulse for a pacing cycle that includes the pacing pulse.

29. The cardiac stimulus device lead of claim 1, wherein the second conductor is coupled to a second electrode located on the lead.

30. The cardiac stimulus device lead of claim 1, wherein the second conductor is coupled to a conductive surface on the pulse generator.

31. The cardiac stimulus device lead of claim 1, further comprising:

a capacitor;

a first switch adapted to selectively couple the capacitor between the first conductor and the second conductor to store a charge on the capacitor from a pacing pulse; and

a second switch adapted to selectively couple a power input of the sensing circuit to the capacitor to provide power from the charge stored thereon,

wherein the multiplexer switch is adapted to selectively couple the first conductor either to the first electrode or to the output of the sensing circuit,

wherein the controller is coupled to the capacitor to provide power from the charge stored thereon and is coupled to the control input of the sensing circuit, and

wherein the controller is adapted to control the sensing circuit and to selectively actuate the first switch, the second switch and the multiplexer switch.

32. The cardiac stimulus device lead of claim 31, wherein the controller is adapted to control the sensing circuitry to process and output sensor data after a pacing pulse and before an active discharge pulse.

33. The cardiac stimulus device lead of claim 32, wherein the controller is adapted for opening the first switch and closing the second switch to process sensor data, and for further actuating the multiplexer switch to couple with the sensor circuit output to output the sensor data.

34. The cardiac stimulus device lead of claim 33, wherein the controller is adapted for opening the second switch and actuating the multiplexer switch to couple with the first electrode prior to initiating the active discharge pulse.

35. A cardiac stimulus device, comprising:

a pulse generator having a standard header; and

at least one lead for coupling to the standard header, wherein the lead includes:

a first conductor connected to a multiplexer switch, the multiplexer switch including a first terminal connected to a first electrode and a second terminal connected to a sensing circuit;

a second conductor connected to a second electrode; and

a controller connected to the multiplexer switch,

wherein the controller is adapted to selectively connect the first conductor to one of the first electrode and the sensing circuit.

36. The cardiac stimulus device of claim 35, wherein the sensing circuit is a micro-electromechanical system.

37. The cardiac stimulus device of claim 35, wherein the sensing circuit is adapted to sense biochemicals.

38. The cardiac stimulus device of claim 35, wherein the sensing circuit is adapted to sense oxygen.

39. The cardiac stimulus device of claim 35, wherein the sensing circuit is adapted to sense carbon dioxide.

40. The cardiac stimulus device of claim 35, wherein the sensing circuit is adapted to sense catecholamines.

41. The cardiac stimulus device of claim 35, wherein the sensing circuit is adapted to sense temperature.

42. The cardiac stimulus device of claim 35, wherein the sensing circuit is adapted to sense pressure.

43. The cardiac stimulus device of claim 35, wherein the pulse generator includes a circuit for generating the electrical pulse, a circuit for sensing intrinsic electrical cardiac signals, and a circuit for receiving sensor data from the sensing circuit.

44. The cardiac stimulus device of claim 43, wherein the pulse generator includes a communications circuit for communicating with a programmer, and wherein the programmer is adapted for retrieving data from the pulse generator, including sensor data from the sensing circuit.

45. A method, comprising:

generating a pacing pulse for transmission on a cardiac stimulus device lead;

processing sensor data at the lead;

outputting sensor data for transmission on the lead;

initiating an active discharge pulse for transmission on the lead; and

preparing for a subsequent pacing pulse.

46. The method of claim 45, wherein outputting sensor data occurs after generating a pacing pulse and before initiating an active discharge pulse.

47. The method of claim 45, wherein outputting sensor data occurs in a predetermined time slot with respect to generating a pacing pulse.

48. The method of claim 45, wherein outputting sensor data occurs in response to receiving an electrical signal.

49. The method of claim 45, wherein outputting sensor data occurs in response to detecting the pacing pulse.

50. The method of claim 45, further comprising:

providing a first predetermined delay after generating a pacing pulse and prior to processing sensor data;

providing a second predetermined delay after processing sensor data and prior to outputting sensor data;

providing a third predetermined delay after outputting sensor data and prior to initiating an active discharge pulse; and

providing a fourth predetermined delay after initiating an active discharge pulse and prior to preparing for the next pacing pulse.

51. The method of claim 45, wherein generating a pacing pulse occurs during an initial state that is formed by bleeding a pacing pulse to store a charge on a capacitor, disconnecting a sensor circuit from the charge stored on the capacitor, and coupling a first conductor to a first electrode to deliver the pacing pulse to the heart.

52. The method of claim 51, wherein processing sensor data includes disconnecting the capacitor from a first conductor and providing power to the sensing circuit from the charge stored on the capacitor.

53. The method of claim 52, wherein disconnecting the capacitor from a first conductor includes opening a first switch positioned between the capacitor and the first conductor, and providing power to the sensing circuit includes closing a second switch positioned between the capacitor and the sensing circuit.

54. The method of claim 45, wherein processing sensor data includes processing sensed biochemical data.

55. The method of claim 45, wherein processing sensor data includes processing sensed oxygen data.

56. The method of claim 45, wherein processing sensor data includes processing sensed carbon dioxide data.

57. The method of claim 45, wherein processing sensor data includes processing sensed catecholamines data.

58. The method of claim 45, wherein processing sensor data includes processing sensed temperature data.

59. The method of claim 45, wherein processing sensor data includes processing sensed pressure data.

60. The method of claim 45, wherein outputting sensor data includes coupling an output of the sensor circuit to a first conductor.

61. The method of claim 60, wherein outputting sensor data includes actuating a third switch to couple the output of the sensor circuit to the first conductor.

62. The method of claim 45, wherein initiating an active discharge pulse includes disconnecting a sensor circuit from a charge stored on a capacitor, and coupling a first conductor to a first electrode.

63. The method of claim 62, wherein disconnecting a sensor circuit from the charge stored on the capacitor includes opening a second switch to disconnect the sensor circuit from the charge stored on the capacitor, and actuating a third switch to couple the first conductor to the first electrode.

64. The method of claim 45, wherein preparing for a subsequent pacing pulse includes closing a first switch to charge a capacitor by bleeding power from a subsequent pacing pulse.

65. The method of claim 45, further comprising sensing intrinsic cardiac electrical signals after initiating an active discharge pulse.

66. The method of claim 45, wherein the pacing pulse is generated by a pulse generator, then the sensor data is output by a sensing circuit, then the active discharge pulse is initiated by the pulse generator, and then an intrinsic cardiac electrical signal is sensed by the pulse generator using lead electrodes.

67. A method of forming a cardiac stimulus device lead, comprising:

providing a first conductor;

providing a second conductor;

providing a multiplexer switch with a first and second terminal;

providing a sensing circuit;

providing a first electrode;

providing a second electrode;

coupling the first conductor to the multiplexer switch;

coupling the first terminal of the multiplexer switch to the first electrode;

coupling the second terminal of the multiplexer switch to the sensing circuit;

coupling the second conductor to the second electrode;

providing a controller adapted to selectively connect the first conductor to one of the first electrode and the sensing circuit; and

coupling the controller to the multiplexer switch.